Commonwealth of Massachusetts OPEB Commission

Municipal Analysis

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Kathleen A. Riley, FSA, EA, MAAA Senior Vice President and Actuary

Daniel J. Rhodes, ASA, MAAA, FCAConsulting Actuary

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Municipalities

| Name | Valuation Date | Number of Active Employees | Number of Retirees and Spouses |
|---|-----------------|-------------------------------|--------------------------------|
| City of Boston | July 1, 2011 | 15,537 | 14,234 |
| City of Holyoke | July 1, 2009 | 1,147 | 1,328 |
| Town of Wellesley | July 1, 2012 | 903 | 877 |
| Town of Acton | January 1, 2011 | 382 | 272 |
| Acton-Boxborough Regional School District | January 1, 2011 | 346 | 237 |
| Town of Falmouth | July 1, 2010 | 818 | 596 |
| Town of Barnstable | July 1, 2010 | 839 | 722 |

Approach

- 30-year forecast valuations were run to account for new entrants replacing terminated or retiring employees.
 - New entrant age at hire was based on average of recent hires.
- > The baseline valuation reflects pension reform changes for new entrants.
- Demographic assumptions (except retirement rates) were from the most recent OPEB valuation of the municipality.
 - Retirement assumptions were changed to reflect possible change in behavior due to pension reform changes and changes in OPEB benefits.
- ➤ Health care trend assumption began at 8% in 2012 decreasing by 0.5% per year until an ultimate trend of 5% was reached.
- > A 4.5% discount rate was used for all municipalities.

Variables that Affect Results

- Age and service characteristics of active members
- Age of retired members
- Age of new entrants
- Percentage of Group 4 employees
- > Ratio of active members to retired members
- > Underlying benefit plan, including cost sharing amongst employer and retiree
- Demographic assumptions
- Measurement date of valuation

Observations

- Savings for Group 1 are greater than savings for Group 4.
 - City of Boston has greatest percentage of Group 4.
- Changing service eligibility results in more savings than changing age eligibility.
 - Changing age eligibility reduces the number of years benefits are paid.
 - Changing service eligibility eliminates coverage for those employees who retire prior to meeting the service requirement.
- > Savings for graded cost sharing include the savings for increasing the service eligibility.

Change Applied to All Current Employees Year 10 Cash Flow Savings

| Eligibility Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
|---|--------|--------|-----------|-------|---------|---------|----------|------------|
| Higher Age | | | | | | | | |
| By 5 years | 8% | 2% | 2% | 2% | 2% | 3% | 4% | 4% |
| By 7 years | 13% | 3% | 4% | 7% | 7% | 6% | 10% | 10% |
| By 10 years | 24% | 7% | 11% | 16% | 20% | 15% | 18% | 20% |
| Longer Service | | | | | | | | |
| • 15 years | 5% | 4% | 11% | 10% | 13% | 13% | 14% | 10% |
| • 20 years | 12% | 8% | 18% | 21% | 25% | 19% | 26% | 21% |
| • 25 years | 20% | 12% | 23% | 32% | 34% | 35% | 32% | 32% |
| Age Service Combination | | | | | | | | |
| By 5 years (age) and 15 years (service) | 13% | 5% | 13% | 11% | 14% | 15% | 18% | 14% |
| Cost Sharing Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
| Graded Approach | | | | | | | | |
| • 15 to 25 | 14% | 6% | 10% | N/A | N/A | 12% | 16% | 14% |
| • 20 to 35 | 23% | 12% | 17% | N/A | N/A | 21% | 27% | 26% |
| Cap Subsidy | | | | | | | | |
| Mid-Point pre age 65 | 3% | 2% | 2% | 3% | 3% | 3% | 2% | 3% |
| Inflation only pre age 65 | 5% | 2% | 3% | 4% | 3% | 3% | 2% | 4% |
| Mid-Point all | 4% | 5% | 4% | 7% | 6% | 7% | 5% | 7% |
| Inflation all | 8% | 6% | 5% | 8% | 8% | 9% | 6% | 9% |

^{*} State Results as reported by AonHewitt.

Change Applied to All Current Employees Year 30 Cash Flow Savings

| Eligibility Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
|---|--------|--------|-----------|-------|---------|---------|----------|------------|
| Higher Age | | | | | | | | |
| By 5 years | 4% | 4% | 5% | 1% | 4% | 2% | 2% | 2% |
| By 7 years | 9% | 6% | 10% | 7% | 9% | 9% | 9% | 8% |
| By 10 years | 21% | 11% | 20% | 13% | 18% | 20% | 21% | 22% |
| Longer Service | | | | | | | | |
| • 15 years | 12% | 10% | 23% | 23% | 28% | 30% | 25% | 18% |
| • 20 years | 25% | 16% | 33% | 35% | 43% | 41% | 40% | 32% |
| • 25 years | 35% | 24% | 63% | 49% | 54% | 69% | 55% | 44% |
| Age Service Combination | | | | | | | | |
| By 5 years (age) and 15 years (service) | 21% | 22% | 31% | 24% | 30% | 37% | 37% | 29% |
| Cost Sharing Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
| Graded Approach | | | | | | | | |
| • 15 to 25 | 30% | 15% | 21% | N/A | N/A | 30% | 24% | 23% |
| • 20 to 35 | 45% | 26% | 32% | N/A | N/A | 44% | 40% | 38% |
| Cap Subsidy | | | | | | | | |
| Mid-Point pre age 65 | 5% | 4% | 6% | 5% | 4% | 5% | 3% | 3% |
| Inflation only pre age 65 | 9% | 5% | 8% | 7% | 6% | 7% | 4% | 5% |
| Mid-Point all | 14% | 15% | 14% | 16% | 16% | 19% | 14% | 17% |
| Inflation all | 26% | 20% | 21% | 23% | 22% | 27% | 19% | 25% |

^{*} State Results as reported by AonHewitt.

Change Applied to New Employees Only Year 10 Cash Flow Savings

| Eligibility Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
|---|--------|--------|-----------|-------|---------|---------|----------|------------|
| Higher Age | | | | | | | | |
| By 5 years | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| By 7 years | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| By 10 years | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 0% |
| Longer Service | | | | | | | | |
| • 15 years | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% |
| • 20 years | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% |
| • 25 years | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% |
| Age Service Combination | | | | | | | | |
| By 5 years (age) and 15 years (service) | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% |
| Cost Sharing Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
| Graded Approach | | | | | | | | |
| • 15 to 25 | 0% | 0% | 0% | N/A | N/A | 1% | 1% | 0% |
| • 20 to 35 | 0% | 0% | 0% | N/A | N/A | 1% | 1% | 0% |
| Cap Subsidy | | | | | | | | |
| Mid-Point pre age 65 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Inflation only pre age 65 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Mid-Point all | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Inflation all | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |

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Change Applied to New Employees Only Year 30 Cash Flow Savings

| Eligibility Changes | State* | Boston | Wellesley | Acton | A-B RSD | Holyoke | Falmouth | Barnstable |
|---|--------|--------|-----------|-------|---------|---------|----------|------------|
| Higher Age | | | | | | | | |
| By 5 years | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% |
| By 7 years | 4% | 3% | 2% | 2% | 3% | 4% | 5% | 3% |
| By 10 years | 9% | 6% | 6% | 6% | 7% | 11% | 14% | 13% |
| Longer Service | | | | | | | | |
| • 15 years | 6% | 9% | 12% | 19% | 22% | 23% | 20% | 14% |
| • 20 years | 14% | 12% | 15% | 25% | 32% | 28% | 31% | 21% |
| • 25 years | 19% | 15% | 18% | 31% | 36% | 31% | 41% | 26% |
| Age Service Combination | | | | | | | | |
| By 5 years (age) and 15 years (service) | 13% | 18% | 16% | 19% | 23% | 28% | 32% | 23% |
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| • 15 to 25 | 18% | 11% | 13% | N/A | N/A | 23% | 20% | 15% |
| • 20 to 35 | 24% | 14% | 15% | N/A | N/A | 28% | 31% | 22% |
| Cap Subsidy | | | | | | | | |
| Mid-Point pre age 65 | 3% | 3% | 2% | 3% | 2% | 2% | 2% | 1% |
| Inflation only pre age 65 | 5% | 3% | 3% | 4% | 3% | 4% | 3% | 3% |
| Mid-Point all | 5% | 5% | 4% | 6% | 7% | 8% | 7% | 5% |
| Inflation all | 9% | 7% | 6% | 9% | 9% | 11% | 10% | 8% |

^{*} State Results as reported by AonHewitt.

Actuarial Disclosures

This report was prepared in accordance with generally accepted actuarial principles and practices to assist the Commission in evaluating changes to the OPEB benefits provides to employees of the Commonwealth of Massachusetts and the municipalities in the Commonwealth.

Additional information on the data, assumptions and plan of benefits will be included in the final report to the Commission.

The measurements shown in this report may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Kathleen A. Riley, FSA, MAAA, EA. She is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial report is complete and accurate. In our opinion, each assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer our best estimate of anticipated experience.